JS 10/21/21
RJA 1/12/22

SAT Report for Case # P-18-0107

General

[redacted]

Report Status: Complete
Status Date: 02/27/2019
CRSS Date: 02/12/2018
SAT Date: 02/13/2018
SAT Chair: Doritza Pagan-Rodriguez
Consolidated PMN? N
Consolidated Set:
Submitter: Lanxess Corporation
CAS Number: [redacted]
Ecotox Related Cases:
Health Related Cases:
Chemical Name: [redacted]
Use: [redacted]
Trade name: Stabaxol P 110
PV Max (kg/yr): [redacted]
Ecotox Assessor: Wright, Tracy
Fate Assessor: Antwi, Frank
Health Assessor: Salazar, Keith

Physical Chemical Information

Molecular Weight:	[redacted]	**Physical State - Neat:**	Solid		
Percent 500:	[redacted]	**Percent 1000:**	[redacted]		
Melting Point (Measured):	60.00 - 90.00	**Melting Point (est):**		**MPD (EPI):**	
Vapor Pressure:		**Vapor Pressure (est):**	<0.000001	**VP (EPI):**	
Water Solubility:		**Water Solubility (EST):**	<0.000001	**Water Solubility (EPI):**	
Log Kow:				**Log Kow (EPI):**	
Log P:		**Log P Comment:**			

SAT Concern

Ecotox Rating (1):	1	**Ecotox Rating Comment (1):**	
Ecotox Rating (2):		**Ecotox Rating Comment (2):**	
Health Rating (1):	2	**Health Rating Comment (1):**	
Health Rating (2):		**Health Rating Comment (2):**	

PBT Ratings

Persistence	Bioaccumulation	Toxicity	Comments
3	1	2	

Exposure Based Review (Health)?	
Exposure Based Review (Ecotox)?	N
SAT Keywords:	SYS, DEV

Fate Assessment Summary:	P-18-0107 FATE: MW = [redacted] with [redacted] < 500 and [redacted] < 1000 Solid with MP = 60-90 °C (M) S = Negl. VP < 1.0E-6 torr at 25 °C (E) BP > 400 °C (E) H < 1.00E-8 (E) POTW removal (%) = 90 via sorption Time for complete ultimate aerobic biodeg > mo Sorption to soils/sediments = v.strong PBT Potential: P3B1 *CEB FATE: Migration to ground water = negl PMN Material: Overall wastewater treatment removal is 90% via sorption. Sorption to sludge is strong based on high molecular volume. Air Stripping (Volatilization to air) is negligible based on high molecular volume. Removal by biodegradation in wastewater treatment is negligible based on high molecular volume. The aerobic aquatic biodegradation half-life is greater than months based on high molecular volume. The anaerobic aquatic biodegradation half-life is greater than months based on the aerobic biodegradation half-life. The anaerobic biodegradation half-life is projected to be greater than or equal to the aerobic biodegradation half-life.

Sorption to soil and sediment is very
strong based on high molecular volume.
Migration to groundwater is
negligible based on high molecular volume.
PMN Material:
High
Persistence (P3) is based on the estimated anaerobic biodegradation
half-life and high molecular volume.
Low Bioaccumulation potential
(B1) is based on high molecular volume.

Bioconcentration/Bioaccumulation factor to be put into E-Fast:
N/A.

Removal in WWT/POTW (Overall): 90

Condition	Rating Values w/ Rating Description	Comment
WWT/POTW Sorption:	3	
WWT/POTW Stripping:	4	
Biodegradation Removal:	4	
Biodegradation Destruction:		
Aerobic Biodeg Ult:	4	
Aerobic Biodeg Prim:		
Anaerobic Biodeg Ult:	4	
Anaerobic Biodeg Prim:		
Hydrolysis (t1/2 at pH 7,25C) A:		
Hydrolysis (t1/2 at pH 7,25C) B:		
Sorption to Soils/Sediments:	1	
Migration to Ground Water:	1	

Condition	Rating Values w/ Rating Description	Comment
Photolysis A, Direct:		
Photolysis B, Indirect:		
Atmospheric Ox A, OH:		
Atmospheric Ox B, O3:		

Health Assessment

Health Summary:

Absorption of the neat PMN material is nil all routes. The low molecular weight fractions are expected to be poorly absorbed all routes (pchem).
For the poorly absorbed polymer species with a MW < 500 and for potential metabolites of the absorbed fraction with a MW between 500 and 1000, there is concern for systemic toxicity and developmental toxicity based on data for an analog [redacted]

Routes of Exposure: Dermal Drinking Water Inhalation

Test Data Submitted

Test Data Submitted: Specific toxicity information for the LVE substance, including PODs and analog data can be found in the Human Health Form A for this LVE. The analog data includes, [redacted]

Ecotox Assessment

Test organism	Test Type	Test Endpoint	Predicted	Measured	Comments
Fish	96-h	LC50	*		Toxicity predictions are based on the negligible water solubility of P-18-0107 (insoluble nonionic polymer); * = no effects at saturation.
Daphnid	48-h	LC50	*		Toxicity predictions are based on the negligible water solubility of P-18-0107 (insoluble nonionic polymer); * = no effects at saturation.
Green Algae	96-h	EC50	*		Toxicity predictions are based on the negligible water solubility of P-18-0107 (insoluble nonionic polymer); * = no effects at saturation.
Fish	-	Chronic Value	*		Toxicity predictions are based on the negligible water solubility of P-18-0107 (insoluble nonionic polymer); * = no effects at saturation.
Daphnid	-	Chronic Value	*		Toxicity predictions are based on the negligible water solubility of P-18-0107 (insoluble nonionic polymer); * = no effects at saturation.
Green Algae	-	Chronic Value	*		Toxicity predictions are based on the negligible water solubility of P-18-0107 (insoluble nonionic polymer); * = no effects at saturation.

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
Acute Acquatic:				Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified.
Chronic Acquatic:				Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified.

Ecotox Route of Exposure?	No releases to water

Factors	Values	Comments
SARs:	Nonionic Polymers	
SAR Class:	Nonionic Polymers-insoluble-[redacted]	
TSCA NCC Category?	None	

Recommended Testing

Ecotox Value Comments

Toxicity predictions are based on the negligible water solubility of P-18-0107 (insoluble nonionic polymer); MW [redacted] with [redacted] <500 and [redacted] <1000; solid with a MP = 60-90C (M); S = negligible (P); effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <150 mg/L as CaCO3; and TOC <2.0 mg/L.

Ecotox Factors Comments

Environmental Hazard: Environmental hazard is relevant to whether a new chemical substance is likely to present unreasonable risk because the significance of the risk is dependent upon both the hazard (or toxicity) of the chemical substance and the extent of exposure to the substance. EPA estimated

environmental hazard of this new chemical substance using predictions based on the negligible water solubility of P-18-0107 (insoluble nonionic polymer). Acute and chronic toxicity values estimated for fish, aquatic invertebrates, and algae are all no effects at saturation. These toxicity values indicate that the new chemical substance is expected to have low environmental hazard. Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified.

Environmental Risk: Risks
to the environment from acute and chronic exposure are not expected at any concentration of the new chemical substance soluble in the water (i.e., no effects at saturation).